EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ira J. Schultz.

The application has been amended as follows:

Claims 1-10 (canceled)

11. (new) An installation system for the high-speed acquisition of acquisition data including an Ethernet network with a plurality of nodes (N), where at least one of the nodes of the Ethernet network constitutes a client/server detection unit with at least one detector delivering acquisition data, said client/server detection unit comprising:

self-triggering resources for reading the acquisition data so that the client/server detection unit is able to operate independently;

reading and processing resources independent of other nodes of the network;

resources for transmission of the acquisition data via the Ethernet network to at least one other node (N);

a clock unit allowing correlation between clocks of the multiple client/server detection units;

wherein said clock unit comprises:

resources for receiving a clock synchronization signal, generated by each of the client/server detection unit and including encoded instructions;

resources for transmission of an acknowledgment signal to each of the client/server detection unit transmitting the synchronization signal; and

resources for processing the encoded instructions, to increment an event-marking sensor;

a detector performing a conversion of a physical magnitude into electrical signals delivered on several output paths;

a sequencer with resources performing:

sequencing for reading the clock synchronization signal from the clock unit;

sequencing for reading the acquisition data from the detector and configuration data;

storage of the acquisition and configuration data;

analysis and processing of the acquisition data from the detector;

an interface to an Ethernet network processor, and the Ethernet network processor with resources providing:

an interface to the sequencer;

reception of the data sent by a user unit to perform the configuration of the detector and of the sequencer;

processing of the acquisition data; and

transmission of the acquisition data from the detector to the user unit.

12. (new) The ~~An~~ installation system according to claim 11, wherein the sequencer includes resources performing:

formatting of the acquisition data from the detector and of the information resulting from the processing effected by the detection unit;

storage in a memory of the processed and formatted acquisition data, and temporal marking of a trigger for acquisition of the data.

13. (new) The ~~An~~ installation system according to claim 12, wherein the sequencer is built around an FPGA device.

14. (new) The ~~An~~ installation system according to claim 11, wherein the Ethernet network processor includes resources performing:

retrieval of the data stored in the memory by the sequencer,

analysis and processing of the said data, formatting of the processed data, and

shared management of the data processing with other nodes of the network.

15. (new) The ~~An~~ installation system according to claim 12, wherein the sequencer performs the storage of the data in memory inside or outside the sequencer.

16. (new) The ~~An~~ installation system according to claim 11, wherein the detector includes: a sensitive sensor with a series of output paths,

a sub-module for reading the acquisition data, controlled by the sequencer and including a frontal electronic unit, and

a control sub-module managed by the sequencer to configure and control the frontal electronic unit.

17. (new) The ~~An~~ installation system according to claim 16, wherein the frontal electronic unit of the sub-module for reading includes:

resources for reading the acquisition data, resources for selection of an acquisition mode; resources for selection of an acquisition trigger source; and

resources for amplification and shaping of signals, and resources for receiving configuration parameters.

18. (new) The ~~An~~ installation system according to claim 16, wherein the control sub-module includes resources to control the frontal electronic unit and to control the detector.

19. (new) The ~~An~~ installation system according to claim 11, wherein at least one of the nodes (N) of the Ethernet network constitutes a client/server user unit designed to provide the detection unit with configuration data from the unit, and to receive acquisition data transmitted by the detection unit.

Allowable Subject Matter

2. Claims 11-19 are allowed. The prior art failed to disclose a sequencer with resources performing: sequencing for reading the clock synchronization signal from the clock unit; sequencing for reading the acquisition data from the detector and configuration data; storage of the acquisition and configuration data; analysis and processing of the acquisition data from the detector, as recited in claim 11.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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